

Exoplanet Fact Sheet – 8/26/10

Year first exoplanet was discovered: **1995**

Total number of confirmed exoplanet discoveries: **473**

Number of known stars with multiple planets: **43**

Number of known stars with multiple transiting planets: **1 (Kepler-9)**

Star with the most known planets: **55 Cancri (5 planets)**

Most massive known exoplanet: **HD 43848 -- 25 times the mass of Jupiter**

Least massive known exoplanet: **Gliese 581 e -- 1.9 times the mass of Earth**

Largest known exoplanet (by diameter): **CT Cha b -- 2.2 times the radius of Jupiter**

Smallest known exoplanet (by diameter): **CoRoT-7 b -- 1.7 times the radius of Earth**

Number of confirmed planets discovered by Kepler: **7**

Number of planet candidates (not yet confirmed) by Kepler: more than 700

Number of known transiting exoplanets: **94**

First (and only) exoplanet with a confirmed rocky surface: **CoRoT-7 b**

Number of habitable exoplanets discovered to date: **Zero**

Glossary

Exoplanet – A planet that orbits a star other than our sun.

Transiting Exoplanet – A planet that passes directly between its star and Earth. Kepler observes the change in a star's light when this happens, an observation technique referred to as the **Transit Method**.

Orbital Period – The amount of time it takes for a planet to complete one full revolution around its star (its “year”). All of Kepler's current discoveries have very short orbital periods.

Orbital Radius – The distance between a planet and its star. A planet's distance from its star affects its temperature and ability to harbor life as we know it.

Habitable Zone – Area around a star where liquid water can exist. Water is one of the essential ingredients for life as we know it. None of Kepler's discoveries so far are in the habitable zone.

For more information about the latest exoplanet news and discoveries, visit the Jet Propulsion Laboratory's PlanetQuest website **at** <http://planetquest.jpl.nasa.gov/> . Learn more about the known exoplanets at http://planetquest.jpl.nasa.gov/atlas/atlas_index.cfm .